

REMARKS

Formal, non-narrowing antecedinal changes that do not invoke any present Festo decision are made above.

Reconsideration and allowance are, therefore, requested.

Respectfully submitted,



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38. (new amended) In a recoil buffering apparatus for use with an artillery gun of a type mounted on a support platform and including a breech assembly connected to a barrel, the breech assembly having a firing mechanism for firing a projectile through an open end of the barrel, the improvements comprising:

a) at least two recoil buffering cylinders engaged to and to move in unison with said barrel during recoil action of the barrel caused by the firing of the projectile, each said at least two recoil buffering cylinders oriented to have its longitudinal direction parallel to that of said barrel,

b) a piston and piston rod assembly for each of said at least two recoil buffering cylinder,

wherein said piston of each said assembly is slidably engaged within its respective recoil buffering cylinder, and

wherein said piston rod of each said assembly is secured to said support platform, the engagement of each assembly with its respective recoil buffering cylinder providing a first means of support to said at least two recoil buffering cylinders from said support platform,

c) a second means of support by which said at least two recoil buffering cylinders are supported from said support platform, said second means of support including an aperture for each of said at least two recoil buffering cylinders to extend through and relative to which said at least one two recoil buffering cylinder can slide to be guided during recoil action of the barrel in a direction parallel to the longitudinal direction of said barrel,

wherein said barrel is supported by said first means of support via said at least two recoil buffering cylinders and second means of support above said support platform in a manner so that no direct contact with said support platform by said barrel will be made, and wherein during recoil action of the barrel a buffering action between the piston and its respective recoil buffering cylinder will transmit recoil force, via said piston rods to said support platform, whilst the sliding action between said second means of support and said at least ~~one~~ two buffering cylinder allows said second means of support to remain stationary and unsubjected to the recoiling force in said longitudinal direction.

47. (~~new~~ amended) An artillery gun assembly comprising
a barrel with a breech assembly, the breech assembly having a firing mechanism for
firing a projectile through an open end of the barrel,
a support platform by which said barrel is supported
a recoil buffering assembly comprising
a) at least two recoil buffering cylinders engaged to and to move in unison with
said barrel during recoil action of the barrel caused by the firing of the projectile, each said at
least two recoil buffering cylinders oriented to have its longitudinal direction parallel to that
of said barrel,
b) a piston and piston rod assembly for each of said at least two recoil buffering
cylinder,
wherein said piston of each said assembly is slidably engaged within its respective
recoil buffering cylinder, and

wherein said piston rod of each said assembly is secured to said support platform, the engagement of each assembly with its respective recoil buffering cylinder providing a first means of support to said at least two recoil buffering cylinders from said support platform,

c) a second means of support by which said at least two recoil buffering cylinders are supported from said support platform, said second means of support including an aperture for each of said at least two recoil buffering cylinders to extend through and relative to which said at least ~~one~~ two recoil buffering cylinder can slide to be guided during recoil action of the barrel in a direction parallel to the longitudinal direction of said barrel,

wherein said barrel is supported by said first means of support via said at least two recoil buffering cylinders and second means of support above said support platform in a manner so that no direct contact with said support platform by said barrel will be made, and

wherein during recoil action of the barrel a buffering action between the piston and its respective recoil buffering cylinder will transmit recoil force via said piston rods to said support platform, whilst the sliding action between said second means of support and said at least ~~one~~ two buffering cylinder allows said second means of support to remain stationary and un subjected to the recoiling force in said longitudinal direction.

56. (~~new~~ amended) An artillery gun for mounting on a support platform, said gun comprising

a) a barrel with a breech assembly, the breech assembly having a firing mechanism for firing a projectile through an open end of the barrel,

- b) a recoil buffering assembly comprising
- a. at least two recoil buffering cylinders engaged to and to move in unison with said barrel during recoil action of the barrel caused by the firing of the projectile, each said at least two recoil buffering cylinders oriented to have its longitudinal direction parallel to that of said barrel,
 - b. a piston and piston rod assembly for each of said at least two recoil buffering cylinder, wherein said piston of each said assembly is slidably engaged within its respective recoil buffering cylinder, and wherein said piston rod of each said assembly is for securing to a support platform, the engagement of each assembly with its respective recoil buffering cylinder providing a first means of support to said at least two recoil buffering cylinders from said support platform,
 - c. a second means for supporting by which said at least two recoil buffering cylinders from said support platform, said second means of support including an aperture for each of said at least two recoil buffering cylinders to extend through and relative to which said at least one two recoil buffering cylinder can slide to be guided during recoil action of the barrel in a direction parallel to the longitudinal direction of said barrel,

wherein, when so secured to said support platform, said barrel is supported by said first means of support via said at least two recoil buffering cylinders and second means of support above said support platform in a manner so that no direct contact with said support platform by said barrel will be made, and

wherein during recoil action of the barrel a buffering action between the piston and its respective recoil buffering cylinder will transmit recoil force via said piston rods to said support platform, whilst the sliding action between said second means of support and said at least one two buffering cylinder allows said second means of support to remain stationary and unsubjected to the recoiling force in said longitudinal direction.